THAT WHICH IS CLAIMED:

1. A method for the cyclic amplification of proteons in a biological sample comprising:

a) centrifuging said biological sample until a supernatant is formed;

b) dividing said supernatant into a plurality of subsamples; and

c) heating a subsample for a period of time.

2. The method of claim 1, further comprising the steps of:

a) obtaining an aliquot of said heated subsample;

b) placing said aliquot into an unheated subsample;

c) heating the subsample of 2b) for a period of time; and

d) repeating steps 2a) - 2c) with aliquots taken from the most recently heated subsample for a predetermined number of cycles.

3. The method of claim 2, wherein steps 2a) - 2c) are repeated for a predetermined number of cycles until the number of proteons obtained in each heated subsample no longer increases, wherein the number of proteons in the subsample in which the number of proteons no longer increases is indicative of the amount of misfolded proteins present in the biological sample.

4. A method for the detection of a disorder selected from Table 1 or Table 2, comprising:

a) centrifuging a biological sample until a supernatant is formed;

b) dividing said supernatant into a plurality of subsamples;

c) heating a subsample for a period of time;

d) obtaining an aliquot of said heated subsample;

e) placing said aliquot into an unheated subsample;

f) heating the subsample of e) for a period of time; and

g) repeating steps d-f with aliquots taken from the most recently heated subsample for a predetermined number of cycles;

wherein the proteons produced from the most recently heated subsample are further contacted with an antibody that binds to a protein selected from Table 1 or Table 2, wherein the binding of said antibody is indicative of a disorder related to said protein.

5. The method of claim 2, wherein the subsamples are each 1 ml and the aliquot is 5 µl.

6. The method of claim 2, wherein the period of time for each cycle is two hours.

7. The method of claim 2, wherein the period of time for each cycle is one hour.

8. The method of claim 2, wherein the period of time for each cycle is 15 minutes.

9. The method of claim 6, wherein the temperature is 45°C.

10. The method of claim 7, wherein the temperature is 50°C.

11. The method of claim 8, wherein the temperature is 65°C.

12. The method of claim 9, wherein the number of cycles is 20.

13. The method of claim 10, wherein the number of cycles is 10.

14. The method of claim 11, wherein the number of cycles is 6.

15. An isolated proteon nucleation center (PNC) comprising a metal cluster.

16. A process for the purification of the PNC of claim 15 from a biological sample, comprising:

a) centrifuging said biological sample until a supernatant is formed;

b) filtering said supernatant through a 5,000 kD nominal molecular weight limit ultrafiltration membrane; and

c) collecting the filtrate.

17. A PNC product produced by the process of claim 16.

18. The isolated PNC of claim 15, wherein said metal cluster is selected from the group consisting of copper, iron, magnesium, and zinc.

19. A method for inducing apoptosis in cells, comprising contacting a cell culture with at least one isolated PNC of claim 15.

20. A method for clearing misfolded proteins from blood comprising contacting a sample of blood with the PNC of claim 15.